III. Remarks

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-71 are pending in the application. Claims 1, 31, 60, and 68 are independent. Applicants have added new 61-71 to afford themselves a scope of protection commensurate with the disclosure. The new claims are fully supported in the specification and Drawings, and are believed to be allowable for the reasons to be developed below.

The undersigned and Applicants' Canadian representatives, Mr. Omar Nassif and Mr. Martin Bracken, would like to thank Examiner Lawrence for the cordial and productive interview of April 6, 2005. The Examiner's helpful comments and suggestions were instrumental in preparing this response.

The specification has been amended to correct minor informalities and to incorporate the text from the former Appendix. No new matter has been added.

Claims 1-60 were rejected as being unpatentable over WO 01/25154 A1, Schulz, Coviello, and Sperry III, for the reasons discussed on pages 2-4 of the Office Action.

As discussed at the interview, independent Claim 1 recites a novel combination of structure and/or function whereby a fluid treatment system for placement in a flanged pipe fluid conveyance system includes a flanged ductile iron pipe fitting. The fitting has (a) a first flanged opening and a second flanged opening in substantial alignment with each other to define a flow axis aligned substantially parallel to a direction of fluid flow. through the first opening and the second opening, and (b) a third flanged opening. A removable radiation source module is provided and has a first flanged cover element configured to be removably coupled to the third flanged opening. Notably, the first flanged cover element has connected thereto at least two radiation source assemblies each having at least one elongate radiation source with a longitudinal axis substantially non-parallel to the axis of fluid flow axis. Connecting structure is also provided and is configured to couple the first flanged cover element to the third flanged opening.

In contrast, none of the cited art, including WO 01/25154 A1, Schulz, Coviello, and Sperry III (and also Wood (USP 4,367,410, and Kadoya, USP 5,937,266 - both discussed at the interview and cited in an Information Disclosure Statement filed concurrently herewith), whether taken individually or in combination, discloses or suggests such a combination of features, including, *inter alia*, the removable radiation source module having the first flanged cover element configured to be removably coupled to the third flanged opening, and having connected thereto at least two radiation source assemblies each having at least one elongate radiation source with a longitudinal axis substantially non-parallel to the axis of fluid flow axis. For example, Fig. 2 of WO 01/25154 A1 two radiation source modules transverse to the fluid flow, but each radiation source module has its own connection to the fluid pipe.

As also discussed at the interview, independent Claim 31 recites a novel combination of structure and/or function whereby a method of installing a fluid treatment system in an existing piped fluid conveyance system comprises the steps of: (a) extracting a section of pipe from the existing piped fluid conveyance system to define a flanged fluid intake and a flanged fluid feed; (b) disposing a flanged ductile iron pipe fitting between the flanged fluid intake and the flanged fluid feed, where the flanged ductile iron pipe fitting comprises: (i) a first flanged opening and a second flanged opening in substantial alignment to define a flow axis aligned substantially parallel to a direction of fluid flow; (ii) a third flanged opening; (iii) a removable radiation source module comprising a first flanged cover element configured to be removably coupled to the third flanged opening, the first flanged cover element having connected thereto at least two radiation source assemblies each comprising at least one elongate radiation source having a longitudinal axis substantially non-parallel to the flow axis; and (iv) connecting structure configured to couple the first flanged cover element to the third flanged opening; (c) connecting the first flanged opening to the flanged fluid intake in a substantially fluid tight manner; and (d) connecting the second flanged opening to the flanged fluid feed in a substantially fluid tight manner.

Again, none of the cited art (including WO 01/25154 A1, Schulz, Coviello, Sperry III, Wood, and Kadoya), whether taken individually or in combination, discloses or suggests such a combination of method steps, including, *inter alia*, the step of disposing a flanged ductile iron pipe fitting between the flanged fluid intake and the flanged fluid feed, where the flanged ductile iron pipe fitting includes a removable radiation source module comprising a first flanged cover element configured to be removably coupled to the third flanged opening, the first flanged cover element having connected thereto at least two radiation source assemblies each comprising at least one elongate radiation source having a longitudinal axis substantially non-parallel to the flow axis.

As further discussed at the interview, independent Claim 60 recites a novel combination of structure and/or function whereby a fluid treatment system for placement in a flanged pipe fluid conveyance system comprises a flanged ductile iron pipe fitting having (a) a cylindrical ductile iron housing, (b) a first flanged opening and a second flanged opening in substantial alignment to define a flow axis, and (c) a third flanged opening. Notably, a removable radiation source module is provided and includes a first cover element adapted to be removably coupled to the third flanged opening, the first cover element having connected thereto at least two elongate radiation sources each having a longitudinal axis substantially transverse to the flow axis, distal ends of the at least two elongate radiation sources being disposed within the cylindrical ductile iron housing.

Yet again, none of the cited art, whether taken individually or in combination, discloses or suggests such a combination including, *inter alia*, the removable radiation source module having the first cover element adapted to be removably coupled to the third flanged opening, where the first cover element has connected thereto at least two elongate radiation sources, each having a longitudinal axis substantially transverse to the flow axis, distal ends of the at least two elongate radiation sources being disposed within the cylindrical ductile iron housing.

Independent Claim 68 recites a novel combination of structure and/or function whereby a water treatment radiation source module comprises a flanged cover plate configured to be removably coupled to a water pipe flanged opening, and two radiation source modules cantilever-mounted to an inside surface of the flanged cover plate so that the radiation source modules and the flanged cover plate are configured to provide a radiation zone inside the water pipe. Each of the radiation source modules comprises a radiation source disposed inside of a protective sleeve, the radiation source modules being configured to be disposed non-parallel to a direction of fluid flow inside the water pipe. At least one connection aperture in the flanged cover plate is configured to provide electrical connection to the two radiation source modules. Connecting structure is provided and is configured to couple the flanged cover plate to the water pipe flanged opening.

None of the cited art (including WO 01/25154 A1, Schulz, Coviello, Sperry III, Wood, and Kadoya), whether taken individually or in combination, discloses or suggests such a combination including, *inter alia*, two radiation source modules cantilever-mounted to an inside surface of a flanged cover plate, and at least one connection aperture in the flanged cover plate configured to provide electrical connection to the two radiation source modules.

In view of the above, it is believed that this application is now in condition for allowance, and a Notice thereof is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 625-3507. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

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